

Louisville and Jefferson County Metropolitan Sewer District 700 West Liberty Street Louisville Kentucky 40203-1911 502-540-6000 www.msdlouky.org

June 20, 2012

Ms. Donna Seadler Remedial Project Manager Kentucky/Tennessee Section U.S. U.S. Environmental Protection Agency Region IV 61 Forsyth Street Atlanta, GA 30303

Re: Result of Air Quality Monitoring - FY 12, Fourth Quarter (FY12-4Q), Lees Lane Superfund Site, Jefferson County, Kentucky, Administrative Order on Consent, USEPA Docket No-91-32-C

Dear Ms. Seadler:

In accordance with paragraph 11, under <u>Reporting Requirements</u>, of the subject Consent Order and Attachment 1, Operation and Maintenance Plan For Post-Removal Site Control at the Lee's Lane Landfill Site. Section 4.2, <u>Air Quality Monitoring</u>, attached for your information and files is one photocopy each of the following items, prepared by URS Corporation, 1600 Perimeter Park Drive, Suite 100, Morrisville, North Carolina 27560 and received by MSD on June 19, 2012.

- 1. URS Corporation letters dated June 11, 2012, 2 pages.
- 2. Figure 1, Lees' Lane Landfill, Sampling Locations, 1page.
- 3. Table 1, TO-15 Data Summary for Ambient Air Samples at the Lees' Lane Landfill, Sampling date: April 24, 2012, 1 page.
- 4. Table 2, On-Site Meteorological Data, Sampling date, April 24, 2012, 1 page.
- 5. Table 3, TO-15 Data Summary for Gas Monitoring Well Samples at the Lees' Lane Landfill, Sampling date: April 24, 2012, 1 page.



Ms. Donna Seadler December 12, 2011 Page 2

Please advise if you have any questions concerning the attached information.

Sincerely,

Richard H. Watkins, Sr.

Sewer Maintenance Supervisor

RHW/rw Lees-12-4Qtr

Enc.

cc: Kentucky National Resource Environment Protection Cabinet

Mr. Daniel Phelps, Division of Waste Management

Tony Marconi, I&FP Preventive Maintenance & Support Manager

Lee Lane File



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June 11, 2012

Mr. Rick Watkins Louisville Metropolitan Sewer District 3050 Commerce Center Place Louisville, KY 40211

Dear Rick:

Enclosed is the summary analytical report for the ambient air and gas monitoring well samples collected at the Lee's Lane Landfill site on April 24, 2012(Sampling Event 51). Seven ambient samples, along with (G1,G2,G3,G4,G5R,G5L,GMW-1,GMW-2,GMW-3) gas well samples and a field blank were taken.

A map of the site, labeled with the sample collection locations for your reference, is shown in Figure 1. Table 1 is a tabular summary of the ambient samples with the primary analytes required for submission to EPA. Methylene chloride and toluene were detected in small quantities in select ambient samples. Table 3 is a tabular summary of the gas well sample with the primary program analytes. Vinyl chloride was detected in small quantities in wells G1, G3 and G5R, and methane concentrations were consistent with historical data. The detection limits of the primary program analytes (benzene, methylene chloride, toluene, vinyl chloride, and xylenes were less than 2 ppbv which is slightly greater than desired in the program design. The higher reported detection limits are a result of a laboratory change in the calculation methodology for reporting (ND) values not previously reported.

The sampling locations were chosen based on a combination of prevailing on-site meteorology and accessible sites in the adjacent residential neighborhood per the standard sampling protocol. The meteorological conditions were moderate throughout the sampling day; warm (68 °F), with moderate, variable winds. The information displayed in Table 2 was obtained from the Louisville International Airport (Standiford Field) National Weather Service Station. The ambient air samples were collected in Summa canisters positioned 3-5 feet above ground level, integrated over an approximate 7-hour collection period.

The methane analysis was performed by GC/FID using a separate analytical system from the TO-15 analysis employed at STL in Austin. The TO-15 analytical methodology using Gas Chromatography/Mass Spectrometry (GC/MS) was employed. Samples were handled with standard laboratory chain-of-custody procedures. Sample canisters and flow controllers were cleaned and blanked using method TO-12 for total non-methane hydrocarbons prior to field deployment. All of the samples were successfully collected and analyzed for methane and the TO-15 target analytes. Quality control parameters of precision (repeatability) and spiking of surrogate compounds meet internal URS and project-required specifications for all other analyses.

URS Corporation 1600 Perimeter Park Drive, Suite 400 Morrisville, NC 27560 Tel: 919.461.1100 Fax: 919.461.1415



Mr. Rick Watkins Page 2 June 11, 2012

The reliability of this data set can be characterized as good, based on the repeatability (analytical precision), surrogate spike recoveries, blank levels and the relatively few number of unresolved interfering peaks in the sample chromatograms. The April, 2012 field blank canister reported no positive hits other than the surrogate recoveries. The reported results have not been blank corrected in attached tables per our standard project procedure.

Prior to the field sample collection, Wells G-1, GMW-1, GMW-2 and GMW-3 were sampled with a GEM-200 analyzer to test for the presence of methane in the well. Methane was not detected in any of the wells or the vicinity of the well above background by the instrumentation.

URS appreciates the opportunity to assist your staff with this project. Please advise me at (919) 461-1242 if you have any questions.

Sincerely,

Robert F. Jongleux Project Manager

Enclosure

cc: Chris Davis, URS/LOU

Project File/Task 51

## **URS**

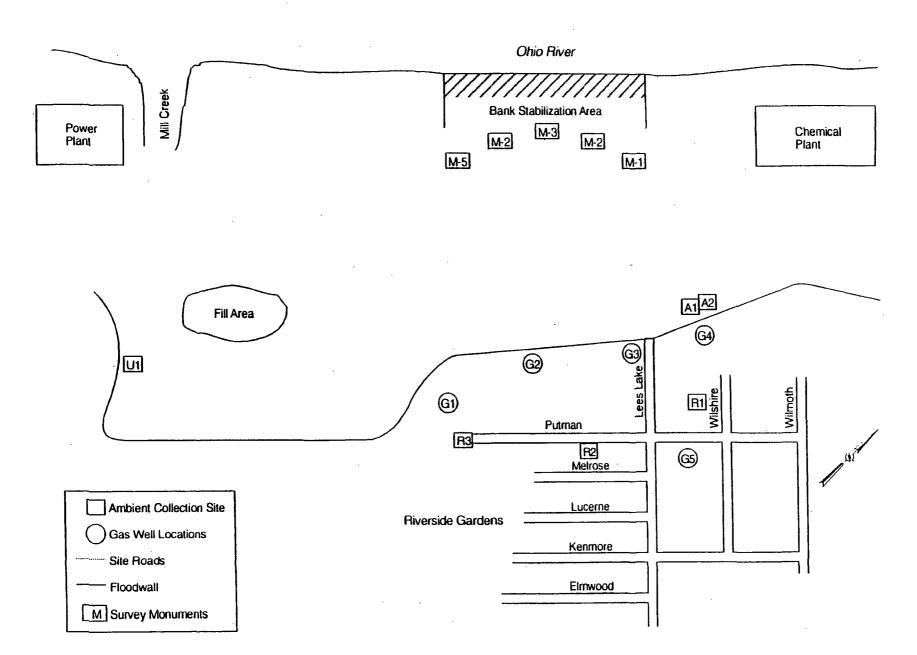


Figure 1. Lees Lane Landfill Sampling Locations



TABLE 1

## TO-15 DATA SUMMARY FOR AMBIENT AIR SAMPLES AT THE LEE'S LANE LANDFILL SAMPLING DATE: 24 APRIL 2012

Sample ID	Ambient Air Samples									
	A1	A2	U1	U2	R1	R2	R3			
Canister ID	RA2244	5438	RA2221	RA2116	RA2030	RA2212	RA2123			
Dilution Factor	4.2952	5.9368	6.0298	4.8832	4.2678	5.8064	6.168			
Location	ONSITE	ONSITE DUP.	LG&E	LEVY	4423 WILSHIRE	PUTNAM LANE	PUTNAM END			
Veriflow ID	A181861	A168513	A218997	FC023	A134120	A218796	· A181856			
Compound (ppbV)										
Benzene	_ ND	ND	ND	ND	0.105	ND	ND			
Methylene chloride	0.0756	0.0522	0.0157	0.0332	0.273	0.0325	0.082			
Toluene	0.0348	0.0772	0.0211	0.0566	0.136	0.0813	0.102			
Vinyl chloride	ND	ND	ND	ND	ND	ND .	ND			
Xylene (Total)	ND	ND	ND	ND	ND	ND	ND			
Methane (ppmV)	4.11	4.56	4.53	4.07	3.82	4.81	4.26			

ND = Non Detect < MDL and < Limit of Quantitation



TABLE 2

## LOCAL METEOROLOGICAL DATA AMBIENT AIR SAMPLES

**SAMPLING DATE: 24 APRIL 2012** 

Time	Barometric Pressure (in Hg)	Temperature	Dewpoint (°F)	Wind Direction (from)	Wind Speed (mph)	Observation
7:56 AM	29.80 in	46.9 °F	34.0 °F	West	11.5 mph	Mostly Cloudy
8:56 AM	29.80 in	50.0 °F	35.1 °F	West	12.7 mph	Mostly Cloudy
9:56 AM	29.82 in	54.0 °F	37.0 °F	WNW	9.2 mph	Mostly Cloudy
10:56 AM	29.83 in	59.0 °F	37.0 °F	NW	9.2 mph	Scattered Clouds
11:56 AM	29.83 in	61.0 °F	37.0 °F	WNW	13.8 mph	Mostly Cloudy
12:56 PM	29.83 in	62.1 °F	36.0 °F	WNW	17.3 mph	Mostly Cloudy
1:56 PM	29.81 in	63.0 °F	34.0 °F	NW	13.8 mph	Mostly Cloudy
2:56 PM	29.80 in	64.0 °F	35.1 °F	NW	16.1 mph	Mostly Cloudy
3:56 PM	29.79 in	62.1 °F	37.9 ℉	West	16.1 mph	Overcast
4:56 PM	29.80 in	59.0 ℉	39.9 ℉	WNW	11.5 mph	Light Rain
5:56 PM	29.80 in	59.0 °F	44.1 °F	West	6.9 mph	Overcast

Source: National Weather Service, Louisville, Ky.